

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,780,536 B2  
DATED : August 24, 2004  
INVENTOR(S) : Debe, Mark K. et al.

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 10,

Lines 10-17, replace the formula with the following:

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since  $\cos \theta = \frac{x_0}{g}$  in Fig. 2 above.

Also from Fig. 2,  $y_0 = 2 \cdot x_0 \tan \theta + w$ . Replacing  $y_0$  in (2) with this gives, from (1),

$$(3) \quad U_{,}(x) = -\frac{K_b}{\mu} \cdot \frac{\Delta P}{N(w+2L)} \frac{\left(w + 2 \frac{x_0}{\cos \theta}\right)}{(w + 2 x_0 \tan \theta)} \quad \text{---}$$

Column 11,

Lines 37-42, replace the formula with the following:

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$$(5) \quad U_{i,j}(x) = -\frac{K_b}{\mu} \cdot \frac{\Delta P_i}{(w_i + 2L_i)} \frac{\left(w_i + 2 \frac{x_0}{\cos \theta_i}\right)}{(w_i + 2 x_0 \tan \theta_i)}, \quad \text{where } \Delta P = \sum_{i=1}^N \Delta P_i \quad \text{---}$$

Line 67, replace the formula with the following:

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$$\rho_i(O_i) = P_{i,O_i} \cdot \frac{M_w}{RT} \quad \text{at that point of loop } i: \quad \text{---}$$

Column 12,

Lines 1-5, replace the formula with the following:

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$$(7) \quad \frac{dm_{i,O_i}}{dA}(x=L) = \frac{-K_L M_w}{RT \mu} \frac{P_{i,O_i} \Delta P_i}{2L_i \sin \theta_i} \quad \text{---}$$

Line 8, replace the formula with the following:

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$$\Delta P_i \text{ and } P_{i,O_i} \quad \text{---}$$

Line 20, replace the formula with the following:

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$$\text{For } P_{i,O_i} \quad \text{---}$$

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Page 2 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 12 (cont'd).

Lines 30-32, replace the formula with the following:

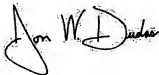
$$\text{--} \quad (9) \quad P_{i,O_1} = P_{in}(O_1) \left( 1 - \frac{i}{N\eta} \right) \quad \text{--}$$

Column 15.

Line 21, delete "zig-zig" and insert in place thereof -- zig-zag --.

Signed and Sealed this

Twenty-third Day of August, 2005



JON W. DUDAS  
*Director of the United States Patent and Trademark Office*